

# A Snapshot of Lymphoma

## Incidence and Mortality

Lymphoma, including [Hodgkin lymphoma](#) and [non-Hodgkin lymphoma \(NHL\)](#), represents approximately 5 percent of all cancers in the United States. Although Hodgkin lymphoma is the better-known form, the incidence of Hodgkin lymphoma is much lower than that of NHL.

Due to improvements in the treatment of Hodgkin lymphoma, [mortality](#) has decreased by nearly 50 percent over the past 25 years. Over the same period, [incidence](#) has remained relatively steady.

NHL incidence had increased over the past three decades but has remained relatively steady since 2004. NHL mortality has declined since 1997. Incidence and mortality for NHL are higher for whites than for African Americans and people of other racial/ethnic groups in the United States.

[Risk factors](#) for both Hodgkin lymphoma and NHL include infections with the [human immunodeficiency virus \(HIV\)](#) or the [Epstein-Barr virus](#). Having an inherited immune disorder or autoimmune disease is a risk factor for NHL, and infections with [Helicobacter pylori](#) or [human T-cell leukemia/lymphoma virus type 1 \(HTLV-1\)](#) increase risk for certain types of NHL. Standard treatments for lymphoma are [chemotherapy](#), [radiation therapy](#), [targeted therapy](#), and [watchful waiting](#).

It is estimated that approximately \$12.1 billion<sup>1</sup> is spent in the United States each year on lymphoma treatment.

Source for incidence and mortality data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at the [SEER](#) Web site.

<sup>1</sup> [Cancer Trends Progress Report](#), in 2010 dollars.

## Trends in NCI Funding for Lymphoma Research

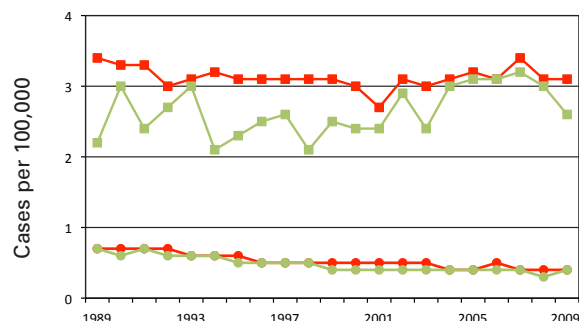
The National Cancer Institute's (NCI) investment<sup>2</sup> in [lymphoma research](#) increased from \$129.5 million in fiscal year (FY) 2007 to \$139.8 million in FY 2011. In addition, NCI supported \$23.2 million in lymphoma research in FY 2009 and 2010 using funding from the American Recovery and Reinvestment Act (ARRA).<sup>3</sup>

Source: NCI [Office of Budget and Finance](#).

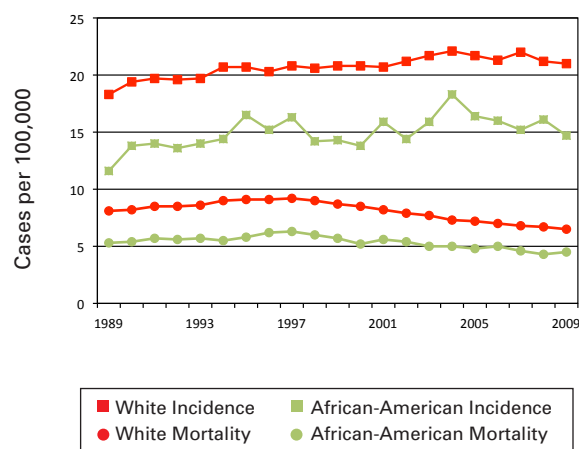
<sup>2</sup> The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see [About NIH](#).

<sup>3</sup> For more information regarding ARRA funding at NCI, see [Recovery Act Funding at NCI](#).

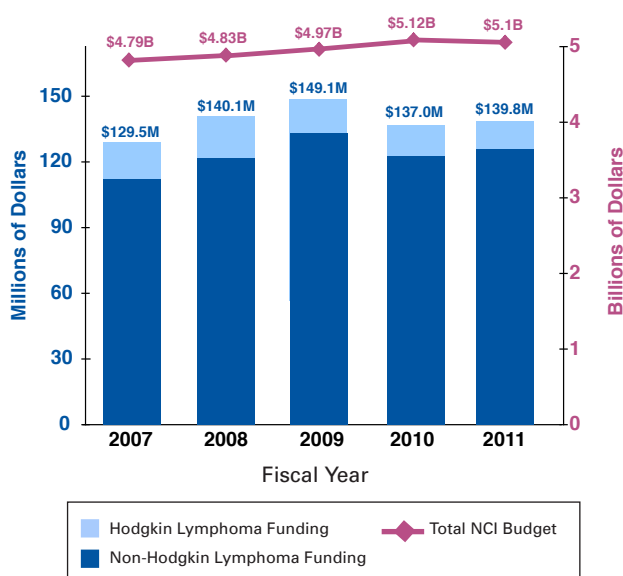
## U.S. Hodgkin Lymphoma Incidence and Mortality



## U.S. Non-Hodgkin Lymphoma Incidence and Mortality



## NCI Lymphoma Research Investment

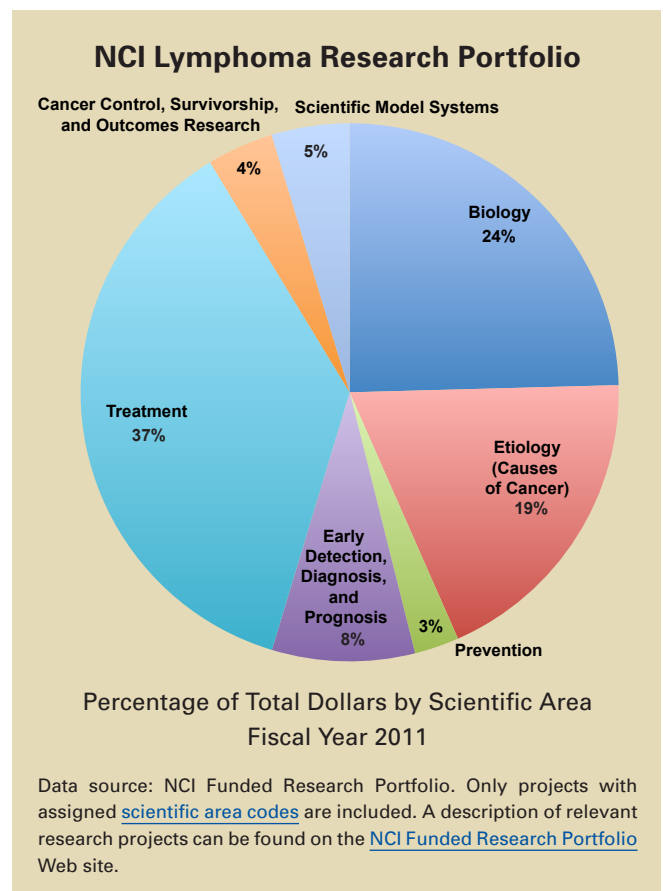


## Examples of NCI Activities Relevant to Lymphoma

- The [Blood and Marrow Transplant Clinical Trials Network](#) conducts large multi-institutional [clinical trials](#) that address issues in [hematopoietic stem cell](#) transplantation to establish the best treatment strategies.
- The [Lymphoma/Leukemia Molecular Profiling Project](#) is examining the gene expression profiles of lymphoid malignancies to refine their classification in molecular terms. Another goal is to use gene expression data for [prognosis](#) and treatment selection.
- Members of the [International Lymphoma Epidemiology Consortium \(InterLymph\)](#), a group of epidemiologists researching the causes of NHL, share data and biological samples to pool data across studies and undertake collaborative research.
- NCI's [Strategic Partnering to Evaluate Cancer Signatures \(SPECS\)](#) program explores how information from molecular studies can be used to improve the care and outcomes of cancer patients. One SPECS project is refining and validating diagnostic and prognostic molecular signatures for the major subclasses of NHL.
- The [Integrative Cancer Biology Program](#) combines experimental and clinical research with mathematical modeling to gain new insight into cancer biology, prevention, diagnosis, and treatment. One center is developing computational models for [B-cell](#) lymphoma.
- Five lymphoma-specific [Specialized Programs of Research Excellence \(SPOREs\)](#) are moving results from the laboratory to the clinical setting. SPORE researchers are evaluating novel lymphoma therapies (including [immunotherapies](#)), studying lymphoma biology and [epidemiology](#), and identifying lymphoma [biomarkers](#).

## Additional Resources for Lymphoma

- The [What You Need To Know About™ Hodgkin Lymphoma](#) and [What You Need To Know About™ Non-Hodgkin Lymphoma](#) booklets contain information about lymphoma diagnosis, staging, treatment, and follow-up care. Information specialists also can answer questions about cancer at 1-800-4-CANCER.
- The NCI [Hodgkin Lymphoma](#) and [Non-Hodgkin Lymphoma Home Pages](#) direct visitors to up-to-date information on lymphoma treatment, prevention, genetics, causes, screening, testing, and related topics.
- Information on treatment options for [Hodgkin lymphoma](#) and [non-Hodgkin lymphoma](#) is available from PDQ, NCI's comprehensive cancer database.
- [Clinical trials for Hodgkin lymphoma](#) and [non-Hodgkin lymphoma](#) can be found in NCI's list of clinical trials.



## Selected Advances in Lymphoma Research

- Clinical trial results showed [durable responses to the targeted drug romidepsin](#) in patients with relapsed [peripheral T-cell lymphoma](#). Published February 2011.
- Researchers found an association between [certain immune markers in the blood and risk of developing non-Hodgkin lymphoma](#). Published June 2011.
- A whole-genome sequencing analysis revealed a number of [novel mutations in diffuse large B-cell lymphoma](#), paving the way for the development of new therapeutic strategies. Published February 2012.
- Preliminary results from clinical trials presented at a national scientific meeting indicate that the [experimental drug ibrutinib may benefit patients with a subtype of diffuse large B-cell lymphoma](#) who are resistant to other treatments. Reported March 2012.
- Click [here](#) to access selected free full-text journal articles on advances in NCI-supported research relevant to lymphoma. Click [here](#) to search for additional scientific articles or to complete a [search tutorial](#) on PubMed.